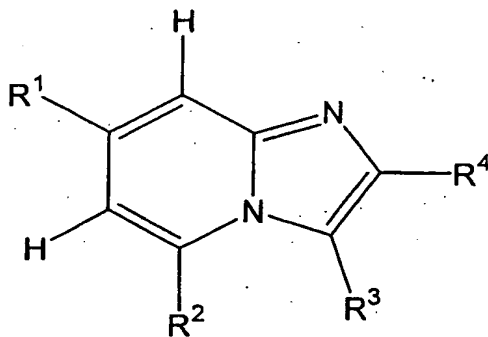


Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of ~~inhibiting nitric oxide synthase~~ treating a condition selected from the group consisting of migraine, Alzheimer's disease and diabetes in a mammal in need thereof, said method comprising administering to said mammal an effective ~~nitric oxide synthase inhibiting~~ amount of at least one imidazo[1,2-a]-pyridine compound corresponding to formula I



wherein,

R¹ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, a C₃₋₈-cycloalkyl radical, a C₃₋₈-cycloalkyl radical which is bonded via a C₁₋₈-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, H, F, Cl, Br, I, CN, NO₂, NH₂, C(=O)R⁵, CO₂H, CO₂R⁶, OH or OR⁷;

- R² represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, a C₃₋₈-cycloalkyl radical, a C₃₋₈-cycloalkyl radical which is bonded via a C₁₋₈-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, H, F, Cl, Br, I, CN, NO₂, NH₂, C(=O)R⁵, CO₂H, CO₂R⁶ or OH;
- R³ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, a C₃₋₈-cycloalkyl radical, a C₃₋₈-cycloalkyl radical which is bonded via a C₁₋₈-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group, CH₂SR⁸, CH₂OR⁸ or H;
- R⁴ represents H, an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group;
- R⁵ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, a C₃₋₈-cycloalkyl radical, a C₃₋₈-cycloalkyl radical which is bonded via a C₁₋₈-alkylene group, a C₃₋₇-heterocyclyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical

or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group;

R⁶ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, a C₃₋₈-cycloalkyl radical, a C₃₋₈-cycloalkyl radical which is bonded via a C₁₋₈-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group;

R⁷ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, a C₃₋₈-cycloalkyl radical, a C₃₋₈-cycloalkyl radical which is bonded via a C₁₋₈-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group; and

R⁸ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkenyl radical, an unsubstituted or at least monosubstituted C₂₋₈-alkinyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group or a C₃₋₈-cycloalkyl radical,

or a salt thereof, wherein said salt is formed with a physiologically acceptable acid.

2. (Original) A method according to claim 1, wherein said compound is present in the form of a free base.

3. (Original) A method according to claim 1, wherein R¹ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, F, Cl, Br, CN, NO₂, NH₂, C(=O)R⁵, CO₂H, CO₂R⁶, OH or OR⁷.

4. (Original) A method according to claim 1, wherein R¹ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical.

5. (Original) A method according to claim 1, wherein R² represents H.

6. (Original) A method according to claim 1, wherein R² represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical.

7. (Original) A method according to claim 1, wherein R³ represents H.

8. (Original) A method according to claim 1, wherein R³ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical.

9. (Original) A method according to claim 1, wherein R⁴ represents H, an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C₁₋₈-alkylene group.

10. (Original) A method according to claim 1, wherein R⁵ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical.

11. (Original) A method according to claim 1, wherein R⁶ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical or an unsubstituted or at least monosubstituted aryl radical.

12. (Original) A method according to claim 1, wherein R⁷ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical or an unsubstituted or at least monosubstituted aryl radical.

13. (Original) A method according to claim 1, wherein R⁸ represents an unsubstituted or at least monosubstituted C₁₋₈-alkyl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical.

14. (Original) A method according to claim 1, wherein said at least one imidazo[1,2-a]-pyridine compound is selected from the group consisting of
2-(4-methoxy-phenyl)-7-methyl-imidazo[1,2-a]pyridine,
2,7-dimethyl-imidazo[1,2-a]pyridine,
7-methyl-imidazo[1,2-a]pyridine,
2-tert-butyl-7-methyl-imidazo[1,2-a]pyridine, and
salts of any of the foregoing with a physiologically acceptable acid.

15. (Original) A method according to claim 14, wherein said at least one imidazo[1,2-a]-pyridine compound is present in the form of a free base.

16. (Canceled)

17. (Currently amended) A method according to claim ~~16~~ 1, wherein said condition is migraine.

18-19. (Canceled)

20. (Currently amended) A method according to claim ~~16~~ 1, wherein said condition is Alzheimer's disease.

21. (Canceled)

22. (Currently amended) A method according to claim ~~16~~ 1, wherein said condition is diabetes.

23-24. (Canceled)